

SOME NEW NORTH AMERICAN SAPROMYZIDÆ (DIPTERA).

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Some of the species described herein have been in my possession for some years, while others were recently submitted for identification by Mr. W. L. McAtee, in connection with the preparation of a paper on the species occurring in the vicinity of Washington, D.C., and by Mr. C. W. Johnson. The location of the type specimens is stated in the paper.

Minettia punctifer, sp. n.

Female.—Testaceous yellow, shining, thoracic dorsum densely yellowish pruinulent. Antennæ and palpi yellow; frons opaque, paler on orbital stripes and ocellar triangle than on interfrontalia; ocellar spot black. Thoracic dorsum with a pale brown dot at base of each hair and bristle. Abdomen with a black spot in centre of each tergite from 2 to 5 inclusive and a smaller spot on each side of the apical two or three tergites. Legs pale. Wings clear.

Frons a little longer than wide, with two strong backwardly directed orbital bristles on each side; arista with very short hairs; parafacial and cheek very narrow. Thorax with three pairs of dorsocentrals, one pair of strong pre-scutellar acrostichals, and a moderately strong intra-alar bristle. Hind femur and hind tibia without preapical bristle. Last section of fourth vein about 1.75 as long as preceding section.

Length 2 mm.

Type.—Fort Lauderdale, Fla., February 18, 1919, (A. Wetmore). Type in collection of U. S. Bureau of Biological Survey.

Sapromyza nubilifera, sp. n.

Male and Female.—Testaceous yellow, shining. Both cross-veins broadly infuscated.

Similar in all respects to *nubila* Melander in cephalic and thoracic details, differing in the male only as follows: Apical sternite with a series of short black setule on apical margin, which are absent in *nubila*; hind tibia and hind metatarsus with long, fine hairs on anterior surface, which are absent in *nubila*; Hind femur in both sexes without fine hairs on antero- and postero-ventral surfaces, the latter especially lacking these, which are present in *nubila*.

Length 3.5–4.5 mm.

Type.—Male, and one male paratype, Monticello, Ill., June 21, 1914. Allotype, Monticello, Ill., June 28, 1914. Paratypes, two males, Mahomet, Ill., August 6, 1914; two males and two females, Urbana, Ill., June 17, 1916; one male and one female, same locality, June 20, 1915; one male and one female, same locality, June 23, 1916 (Hart and Malloch).

Type in collection of Illinois Natural History Survey.

Sapromyza fuscibasis, sp. n.

Male and Female.—Yellow testaceous, shining. Each wing with 6 brown spots as follows: on each cross-vein, at apices of veins 2, 3 and 4, and on last section of 3 beyond cross-vein; base of third vein dark brown. All hairs and bristles black.

Arista short-haired above and below; lateral facial hairs weak; ocellar and postvertical bristles strong. Thorax with 3 pairs of strong dorsocentrals and very strong acrostichals, of which two pairs are proximad of the anterior pair of dorsocentrals. Abdomen in male stout; eighth tergite with two curved downwardly projecting processes at apex of each lateral extension, one of them with numerous microscopic black points on apical half. Hind femora with or without a weak preapical antero-ventral bristle; hind tibia in male normal.

Length 3.75-4.25 mm.

Type.—Male and two male paratypes, White Heath, Ill., July 11, 1915, (J. R. Malloch). Allotype, and one male and two female paratypes, Summer, Ill., August 2, 1914, (C. A. Hart). Paratypes, one female, St. Joseph, Ill., June 27, 1915; one male, Dubois, Ill., August 8, 1917, (J. R. Malloch); one male, Urbana, Ill., September 15, 1891, (J. Marten); two females, Plummer's Island, Md., June 28, 1914, and September 13, 1914; (W. L. McAtee).

Type in collection of Illinois Natural History Survey.

Sapromyza (Sapromyzosoma) citreifrons, sp. n.

Male.—Pale yellowish testaceous, almost stramineous, the frons, and at times the entire head lemon yellow. Wings marked as in *fuscibasis*, but the spot at apex of second vein is almost indistinguishable, and the base of third vein is pale. Bristles on dorsum of head, thorax, and abdomen brown, the hairs and bristles on sides of head and thorax and on legs yellow.

Head very large, the frons slightly swollen, parafacial in profile wider than third antennal segment; arista with short hairs; cheek about half as high as eye, the marginal hairs long, curled. Thorax with 4 pairs of dorsocentrals which decrease very much in size anteriorly; acrostichals small but distinct, about 6 pairs, not carried proximad of the anterior dorsocentrals. Abdomen short, constricted at apex, when the hypopygium is concealed the basal portion, eighth tergite, appears spherical; lateral extension of eighth tergite with a short, broad, apically rounded terminal process. Bristles on fore coxæ and postero-ventral surface of fore femora remarkably long and slender; mid femur with a very long slender bristle at base on ventral surface; hind tibia normal.

Length 2.5-3 mm.

Type.—Savanna, Ill., June 13, 1917. Paratypes, Cobden, Ill., May 9, 1918, (J. R. Malloch). Five males.

Sapromyza occidentalis, sp. n.

Male and Female.—Similar to *fraterna* Loew and *notata* Fallen in colour, the entire body being yellowish testaceous including the legs, and each wing with 7 brown spots.

Differs from the above two species in having the thorax with 4 pairs of dorsocentral bristles, the acrostichals much weaker and regular in size; and the hind femur without a preapical antero-ventral bristle. The hypopygium of the male differs in structure from that of *fraterna*.

Length 3.5-4 mm.

Type.—Male, and allotype and five male paratypes Pasadena, Cal., (coll. Aldrich). One male paratype, Laguna Beach, southern California, (Baker). Type in collection of Dr. Aldrich.

Sapromyza pernotata, sp. n.

Male.—Similar to *fraterna* in colour and markings.

Differs in structure of the male hypopygium from *fraterna*, the thoracic chaetotaxy being the same. The eighth tergite has the lateral extension with a short process the apex of which is produced in the form of a slightly forwardly directed sharp thorn at its anterior angle, while in *fraterna* this tergite has a broader process which has a backwardly directed, curved sharp thorn at apex anteriorly. The small furcate process mesad of the above process is differently shaped in the two species. In *fraterna* there are two subequal thorns, while in *pernotata* one is much larger than the other.

Length 4 mm.

Type and one male paratype.—Cedar Lake, Ill., August 4, 1906, in a tamarack bog.

Type in collection of Illinois State Natural History Survey.

Sapromyza imitatrix, sp. n.

This and the next species belong to the same group as *bispina* Loew, which contains species with the following characters: Entire body and legs yellowish testaceous, wings unmarked, the cross-veins usually darker than the others, but the adjoining membrane not infuscated; arista with short hairs; thorax with 4 pairs of strong dorsocentrals and well-developed acrostichals; hind tibia of male with soft erect hairs on antero- or postero-ventral surface or on both; and the apical abdominal sternite with two long slender processes.

Male.—Differs from *bispina* in having the processes of apical sternite almost uniform in width, rounded at apices; the hind femur with long, fine hairs on entire length of both antero- and postero-ventral surfaces, and the hind tibia with long, fine hairs from base to well beyond middle on postero-ventral surface, while the antero-ventral surface is bare.

Female.—Differs from *bispina* in having the prosternum bare, and the hind femur with a long setulose hair near apex on postero-ventral surface.

Length 4-4.5 mm.

Type.—Male, and one male paratype, Clementon, N. J., May 30, 1895. Allotype, Anglesea, N. J., July 19, 1891. Paratypes, one male, Riverton, N. J., July 7; one female, DaCosta, N. J., June 4, (C. W. Johnson).

Type in collection of C. W. Johnson.

Sapromyza fratercula, sp. n.

Male.—Differs from *imitatrix* in having the hind femur with very few sparse hairs on postero-ventral surface, and those on antero-ventral longer and stronger on apical half and almost absent on basal; the hind tibia with fewer hairs on postero-ventral surface and some at base on antero-ventral; the eighth tergite with a slight ridge on lateral extension posteriorly; and the small, median thorn at base of the large, slender forwardly directed hypopygial process furcate instead of simple.

Length 5 mm.

Type and two male paratypes, Powderville, Mont., June 15, 1916, (R. Kellogg and M. Hanna). Type in collection of U. S. Bureau of Biological Survey.